

WHAT IS CLAIMED IS:

- 1 1. A method for diagnosing a computer over a network, comprising:
2 providing a program to execute on the computer, wherein the program causes
3 the computer to perform:
4 (i) downloading at least one object from a server to the computer over
5 the network;
6 (ii) determining performance data with respect to downloading the
7 object from the server to the computer over the network to diagnose
8 performance problems with the computer; and
9 (iii) transmitting the determined performance data to a diagnostic
10 system over the network.
- 1 2. The method of claim 1, wherein determining the performance data
2 comprises determining a network transmission time to download the object from the
3 server.
- 1 3. The method of claim 2, wherein the diagnostic computer stores the
2 performance data as a record in a database.
- 1 4. The method of claim 3, wherein the program displays the performance
2 data at the computer being diagnosed and average performance data determined from
3 the database to provide information to diagnose the computer.
- 1 5. The method of claim 3, wherein the diagnostic program displays the
2 performance from the computer being diagnosed and average performance data
3 determined from the database at the server to provide information to diagnose the
4 computer.

1 6. The method of claim 2, further comprising;
2 determining a network transmission time for a probe computer that is in a
3 proximate location with respect to the server to download the at least one object from
4 the server; and
5 using the network transmission time for the probe computer to determine a
6 server load delay time and a network-only delay time which indicates time to
7 download the at least one object from the server to the computer that does not include
8 the server load delay.

1 7. The method of claim 1, wherein providing the program comprises
2 transmitting the program over the network to diagnose the computer.

1 8. The method of claim 1, wherein the program causes the computer to
2 further perform;
3 detecting a presence of a condition occurring as a result of downloading the at
4 least one object from the server;
5 building an electronic message addressed to the diagnostic computer including
6 information on the detected condition;
7 transmitting the electronic message to the diagnostic computer over the
8 network.

1 9. The method of claim 1, wherein the performance data includes trace
2 route data indicating the route packets comprising the object travel through the
3 network when transmitted from the server to the computer.

1 10. The method of claim 1, wherein the diagnostic program comprises an
2 applet that executes within an Internet web browser program executing on the
3 computer.

1 11. A computer system for diagnosing an end user computer over a
2 network, comprising:
3 means for providing a program to execute on the end user computer, wherein
4 the program causes the computer to perform:
5 (i) downloading at least one object from a server to the end user
6 computer over the network;
7 (ii) determining performance data with respect to downloading the
8 object from the server to the end user computer over the network to diagnose
9 performance problems with the end user computer; and
10 (iii) transmitting the determined performance data to the computer system
11 over the network.
12 means for receiving the performance data from the end-user computer; and
13 means for displaying the performance data.

1 12. The system of claim 11, wherein determining the performance data
2 comprises determining a network transmission time to download the object from the
3 server.

1 13. The system of claim 12, further comprising means for storing the
2 performance data as a record in a database.

1 14. The system of claim 13, wherein the program displays the performance
2 data at the end user computer being diagnosed and average performance data
3 determined from the database to provide information to diagnose the end user
4 computer.

1 15. The system of claim 13, further comprising means for displaying the
2 performance from the end-user computer being diagnosed and average performance
3 data determined from the database to provide information to diagnose the end user
4 computer.

1 16. The system of claim 12, further comprising;
2 means for determining a network transmission time for a probe computer that
3 is in a proximate location with respect to the server to download the at least one
4 object from the server; and
5 means for using the network transmission time for the probe computer to
6 determine a server load delay time and a network-only delay time which indicates
7 time to download the at least one object from the server to the computer that does not
8 include the server load delay.

1 17. The system of claim 11, wherein providing the program comprises
2 transmitting the program over the network to diagnose the end user computer.

1 18. The system of claim 11, wherein the program causes the end-user
2 computer to further perform;
3 means for detecting a presence of a condition occurring as a result of
4 downloading the at least one object from the server;
5 means for building an electronic message addressed to the diagnostic
6 computer including information on the detected condition;
7 means for transmitting the electronic message to the diagnostic computer over
8 the network.

1 19. The system of claim 11, wherein the performance data includes trace
2 route data indicating the route packets comprising the object travel through the
3 network when transmitted from the server to the end user computer.

1 20. The system of claim 11, wherein the diagnostic program comprises an
2 applet that executes within an Internet web browser program executing on the end-
3 user computer.
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